

Reviewer Report

Title: ShinyLearner: A containerized benchmarking tool for machine-learning classification of tabular data

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Reviewer name: Karthik Ram

Reviewer Comments to Author:

The authors present a very compelling tool that allows researchers to compare and benchmark algorithms across various packages regardless of their design. Shinylearner also provides a simple web interface that allows users to easily generate Docker commands that anyone can execute (assuming they have a basic knowledge of Docker).

I found the rationale of the paper to be very clear and coherent. The authors make a clear case for the need for benchmarking, especially when comparing disparate algorithms and their various software implementations, especially from the lens of applying supervised learning to biomedical studies. ShinyLearner is modular and extensive, and language agnostic, making it widely useful to a broad community of researchers. It also allows for diverse inputs and standardizes outputs. By running all benchmarks inside a container, it removes the challenges of dealing with complex dependencies, especially for users that may not be technically savvy, all the while not building out a black box. It supports a large number of classification algorithms, has gpu support and is already set up to be sustainable.

Level of Interest

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Quality of Written English

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